

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

November 25, 2009

TO: Internal File

THRU: Daron Haddock, Program Supervisor *DH*

FROM: April Abate, Environmental Scientist II/Lead/Hydrologist *QAA 11-30-2009*

RE: Midterm Permit Review, Andelex Resources, Centennial Project, 007/0019 Task #3409

SUMMARY:

The Division is in receipt of your response to the midterm deficiency letter dated October 1, 2009 under original task #3276.

The initial deficiencies identified at midterm as well as the Division responses are outlined below. The Division has determined that there are some deficiencies that remain outstanding and must be addressed in order for the MRP to comply with the R645 Coal Mining Rules.

TECHNICAL ANALYSIS:

OPERATION PLAN

MINING OPERATIONS AND FACILITIES

Regulatory Reference: R645-301-515.320-322

Analysis:

Andalex Resources sent a Notification of the Aberdeen Mine Closure to the Division on April 1, 2008 indicating that the mine plans for sealing and equipment removal would be finalized by June 2008. In the midterm deficiency response dated October 1, 2009, the Permittee provided clarification as to whether or not the mine is being permanently sealed or is in a temporary cessation. The operator provided several correspondence letters between the mining engineer representing Utah American Energy, the Bureau of Land Management (BLM), and Mine Safety and Health Administration (MSHA). These letters confirm that the mine has been placed into a temporary cessation status with the closure of the Aberdeen mine portal. UAE attributed the temporary closure due to depth and stress factors that were considered a risk to the safety of the underground mining personnel. UAE stated in their letters that mining of longwall panel #10 could no longer be done safely because this panel was beneath 2,800 feet of overburden. New technologies were being pursued that would allow for mining to resume in what coal reserves remain in the longwall panel, provided that it could be done safely at such depths. After approvals were issued by the BLM, SITLA, and MSHA, Andalex provided notice of the temporary cessation to the Division on April 1, 2008.

Findings:

Although the operator submitted various correspondences between the Federal agencies and the mine company clarifying the status of the mine as being in a temporary cessation, there were no changes to the pertinent section of the MRP submitted. Section R645-301-515.300 (page 5-122) should be updated and detail all temporary closure measures undertaken at the Aberdeen mine.

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 773.17, 774.13, 784.14, 784.16, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-300-140, -300-141, -300-142, -300-143, -300-144, -300-145, -300-146, -300-147, -300-147, -300-148, -301-512, -301-514, -301-521, -301-531, -301-532, -301-533, -301-536, -301-542, -301-720, -301-731, -301-732, -301-733, -301-742, -301-743, -301-750, -301-761, -301-764.

Analysis:

Groundwater Monitoring

At the present time, there is only one groundwater monitoring well that is being monitored in the permit area. Well #1 is one of the original wells drilled in the late 1970s reportedly, to provide a source of water for mining operations. The well was later converted to a water-monitoring well to provide water quality data in accordance with the permit performance standards. This well had maintained a relatively steady water level of approximately 75 feet up until 2006 when it suddenly went dry. One possible reason for the well drying up is that a ventilation fan was drilled approximately 400 feet from Well #1, which could have intercepted groundwater in the area.

Findings:

[R645-301-731.200; 731.800]: The permittee has reported that the groundwater monitoring well utilized for quarterly monitoring has been repaired and functioning properly. No further action on the part of the permittee is required at this time.

RECLAMATION PLAN

POST MINING LAND USES

Regulatory Reference: 30 CFR Sec. 784.15, 784.200, 785.16, 817.133; R645-301-412, -301-413, -301-414, -302-270, -302-271, -302-272, -302-273, -302-274, -302-275.

Analysis:

Andalex is responsible for the operation, maintenance and reclamation of the gob gas vent wells that are located along the upper elevations of the permit area. A total of 15 wells were drilled congruent with the original mine plan to vent methane gas from the longwall panels as mining was to progress. However, due to the cessation of mining activities, the wells were no longer needed by Andalex to continue usage. Meanwhile, Oso Energy made separate

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agreements with Andalex to continue to capture methane from some of the better producing wells.

Findings:

[R645-301.412 thru 414]: Appendix X, Section 4, Page 4-2 of the MRP designates the post-mining land use for the gob gas vent wells as “livestock and wildlife grazing and other uses indicated by the landowner i.e. hunting”. Page 4-3 of Appendix X states that no alternative land use was proposed. The R645 coal rules do allow for an alternative post mining land use option under **R645-301.413.300** after consultation with the landowner and/or the land management agency with jurisdiction. If upon notice to the Division, some of the gob gas vent wells are to remain in the permit area, Andalex will be required to update their post mining land use section of the MRP for commercial gas production well usage.

TRANSFER OF WELLS

Regulatory Reference: R645-301-731.400-

Analysis:

Appendix X, Section 731.400 dealing with the transfer of wells references the MRP and does not specify any particular party or entity to transfer ownership and control over the gob gas vent wells.

Findings:

The midterm response does not express a change in post mining land use that would allow the continued operation of the methane gas producing wells under a third party (in this case Oso). Presently, all wells and drill pads that remain in permit area are the responsibility of Andalex who will continue to be required to maintain, bond for, and reclaim the wells and drill pads until such time that a bond release is applied for.

The permittee shall provide notice to the Division as to which wells remaining in their permit area will continue to remain under the Coal Regulatory Program. For example, select wells are presently located above a longwall panel that has not been mined out. At some point in the future, when and if mining in this panel resumes, the wells will be needed for venting purposes. For all other wells that are actively being operated for commercial methane gas recovery, Andalex will need to apply for an alternative postmining land use, then transfer the wells to a third party who will then be required to permit these wells under the State of Utah Oil and Gas program. Andalex can then apply

for bond release on these wells in order to eventually be relieved of reclamation responsibilities.

RECOMMENDATIONS:

The midterm review is not recommended for approval until the following deficiencies are addressed:

[R645.301.515.320-322]: Temporary Cessation Status Update to the MRP. Although the operator submitted various correspondences between the Federal agencies and the mine company clarifying the status of the mine as being in a temporary cessation, there were no changes to the pertinent section of the MRP submitted. Section R645-301-515.300 (page 5-122) should be updated and detail all temporary closure measures undertaken at the Aberdeen mine.

[R645-301.400 & 412 thru 414]: Appendix X, Section 4, Page 4-2 of the MRP designates the post-mining land use for the gob gas vent wells as "livestock and wildlife grazing and other uses indicated by the landowner i.e. hunting". Page 4-3 of Appendix X states that no alternative land use was proposed. A post mining land use change to the MRP, along with the minimal reclamation required for such a land use change, followed by a bond release application for wells currently being utilized by Oso Energy is requested such that the well sites and collection pipeline utilized by Oso would be permitted by the Division's Oil & Gas program. [Deficiency repeated from Task 3276].